

FIG. 1

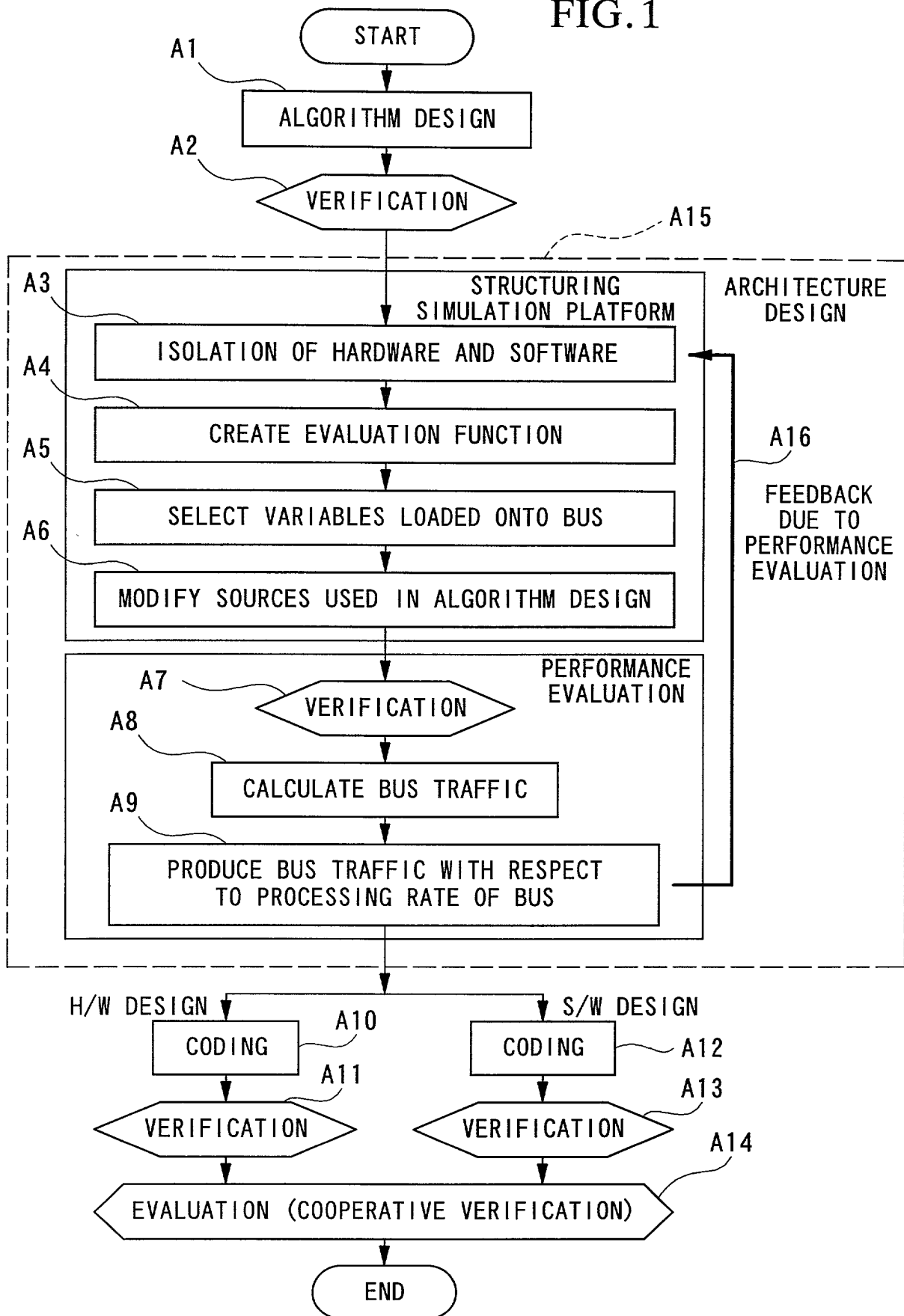


FIG.2

```

#include <stdio.h>

int BUS0(void);

int a;          /*VARIABLE LOADED ON EVALUATED BUS*/
int b;          /*VARIABLE LOADED ON EVALUATED BUS*/
int c;          /*VARIABLE LOADED ON EVALUATED BUS*/

/*MAIN FUNCTION*/
void main(void)
{
    int bus0;
    :
    a=1;          /*EMBED EVALUATION FUNCTION SUBSEQUENT*/
    bus0=BUS0(); /*TO VARIABLE TO WHICH DATA IS WRITTEN*/
    :
    b=1;
    bus0=BUS0();
    :
    c=10;
    bus0=BUS0();
    :
    a=3;
    bus0=BUS0();
    b=4;
    bus0=BUS0();

    printf("BUS Traffic=%d[回] %n", bus0);
    {

/*EVALUATION FUNCTION*/
int BUS0(void)
{
    static int i=0;
    i++;          /*INCREMENT STATIC VARIABLE i */
    return i;
}

```

FIG.3

```
#include <stdio.h>

int BUS0(void);

int a;          /*VARIABLE LOADED ON EVALUATED BUS*/
int b;
int c;          /*VARIABLE LOADED ON EVALUATED BUS*/

/*MAIN FUNCTION*/
void main(void)
{
    int bus0;
    :
    a=1;          /*EMBED EVALUATION FUNCTION SUBSEQUENT*/
    bus0=BUS0(); /*TO VARIABLE TO WHICH DATA IS WRITTEN*/
    :
    :          /*EVALUATION FUNCTION IS NOT*/
    b=1;        /*EMBEDDED SUBSEQUENT TO*/
    :          /*VARIABLE b THAT IS NOT LOADED ON BUS*/
    :
    c=10;
    bus0=BUS0();
    :
    :
    a=3;
    bus0=BUS0();
    b=4;          /*EVALUATION FUNCTION IS NOT*/
    :          /*EMBEDDED SUBSEQUENT TO*/
    :          /*VARIABLE b THAT IS NOT LOADED ON BUS*/

    printf("BUS Traffic=%d[回]¥n", bus0);
    {

/*EVALUATION FUNCTION*/
int BUS0(void)
{
    static int i=0;
    i++;          /*INCREMENT STATIC VARIABLE i */
    return i;
}
```

FIG.4

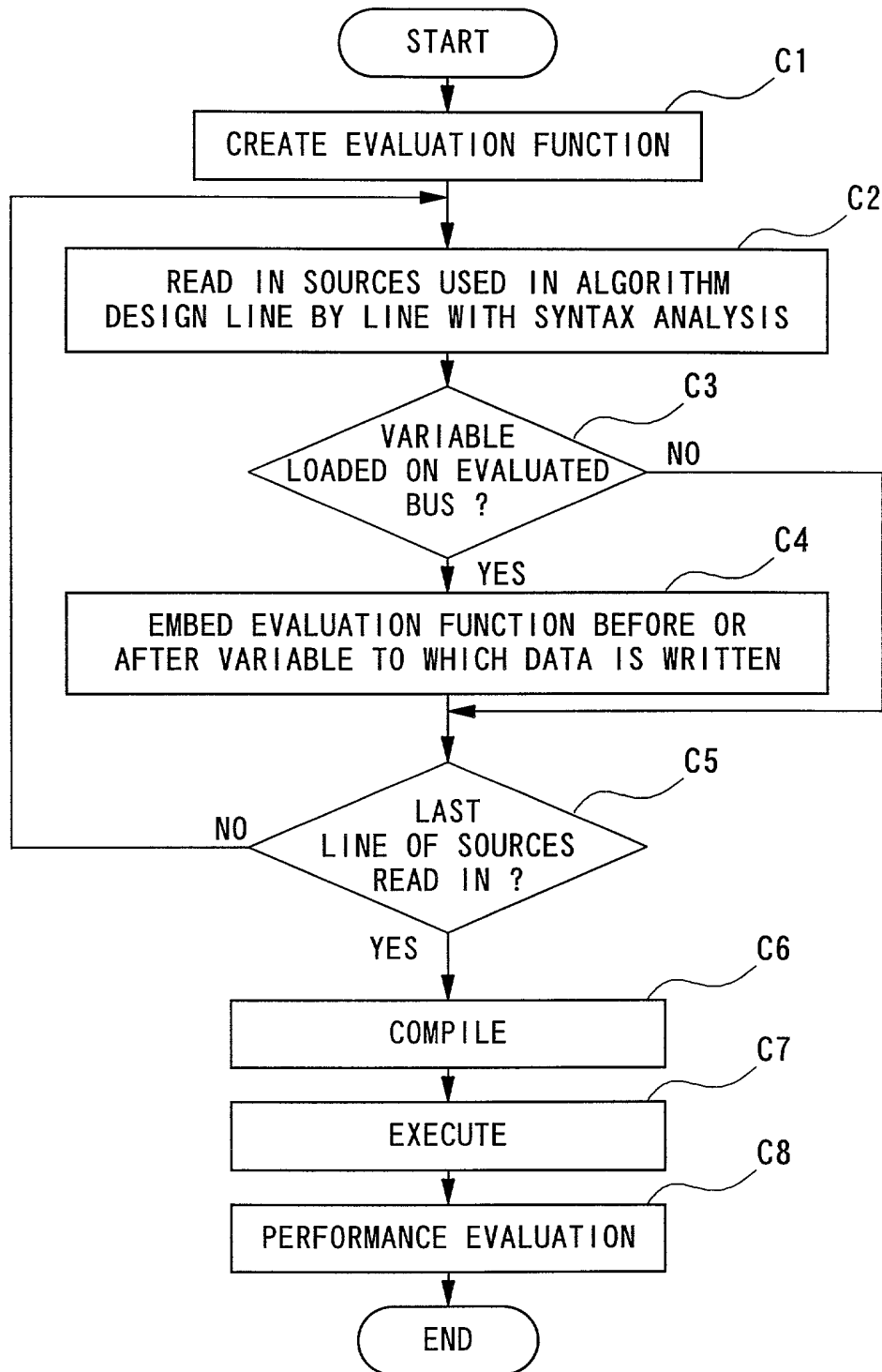


FIG. 4

FIG.5

```
#include <stdio.h>
int BUS0(void);

/*MAIN FUNCTION*/
void main(void)
{
    int a;          /*VARIABLE LOADED ON EVALUATED BUS*/
    int b;          /*VARIABLE LOADED ON EVALUATED BUS*/
    int c;          /*VARIABLE LOADED ON EVALUATED BUS*/

    int bus0;
    :
    a=0;            /*EMBED EVALUATION FUNCTION SUBSEQUENT*/
    bus0=BUS0();    /*TO VARIABLE TO WHICH DATA IS WRITTEN*/
    :
    b=1;
    bus0=BUS0();
    :
    c=10;
    bus0=BUS0();
    :
    a=3;
    bus0=BUS0();
    b=4;
    bus0=BUS0();

    printf("BUS Traffic=%d[回]¥n", bus0);
    {

/*EVALUATION FUNCTION*/
int BUS0(void)
{
    static int i=0;
    i++;          /*INCREMENT STATIC VARIABLE i*/
    return i;
}
```

FIG.6

```
#include <stdio.h>

int BUS0(void);

int a;          /*VARIABLE LOADED ON EVALUATED BUS*/
int b;          /*VARIABLE LOADED ON EVALUATED BUS*/
int c;          /*VARIABLE LOADED ON EVALUATED BUS*/

/*MAIN FUNCTION*/
void main(void)
{
    int bus0;    /*EMBED EVALUATION FUNCTION JUST BEFORE*/
                /*VARIABLE TO WHICH DATA IS WRITTEN*/

    bus0=BUS0();
    a=0;
    :
    bus0=BUS0();
    b=1;
    :
    bus0=BUS0();
    c=10;
    :
    bus0=BUS0();
    a=3;
    bus0=BUS0();
    b=4;

    printf("BUS Traffic=%d[回]¥n", bus0);
    {

/*EVALUATION FUNCTION*/
int BUS0(void)
{
    static int i=0;
    i++;          /*INCREMENT STATIC VARIABLE i*/
    return i;
}
```

FIG.7

```
#include <stdio.h>
int BUS1(int,int);

int a;          /*VARIABLE (32 BITS) LOADED ON EVALUATED BUS*/
int b;          /*VARIABLE (16 BITS) LOADED ON EVALUATED BUS*/

/*MAIN FUNCTION*/
void main(void)
{
    int bus1;
    :
    a=7          /*EMBED EVALUATION FUNCTION SUBSEQUENT*/
    bus1=BUS1(32,8); /*TO VARIABLE TO WHICH DATA IS WRITTEN*/
    :
    bus1=BUS1(32,8);
    a=6;
    bus1=BUS1(16,8);
    b=10;
    printf("BUS Traffic=%d[回]¥n", bus1);
    {

/*EVALUATION FUNCTION*/
int BUS1(int bit,int bus)          /*FUNCTION FOR INCREMENT*/
{                                  /*BY DATA TRANSFER OF BUS*/
    static int i=0;
    i+=bit/bus;
    return i;
}
```

FIG.8

```
#include <stdio.h>
int BUS2(int);

int a[10];      /*VARIABLE (ARRAY) LOADED ON EVALUATED BUS*/
int b[20];      /*VARIABLE (ARRAY) LOADED ON EVALUATED BUS*/

/*MAIN FUNCTION*/
void main(void)
{
    int bus2;
    int *adr;
    :

    adr=&a[0]      /*EMBED EVALUATION FUNCTION SUBSEQUENT TO*/
    bus2=BUS2(10); /*VARIABLE ON WHICH DATA TRANSFER OCCURS*/
    :

    adr=&a[0];
    bus2=BUS2(10)
    adr=&b[0];
    bus2=BUS2(20);
    printf("BUS Traffic=%d[回]n", bus2);
    {

/*EVALUATION FUNCTION*/
int BUS2(int ele)      /*FUNCTION FOR INCREMENT BY ARGUMENT*/
{
    static int i=0;
    i+=ele
    return i;
}
```


FIG.9

```
#include <stdio.h>

void BUS3(void);

int a;          /*VARIABLE LOADED ON EVALUATED BUS*/
int b;          /*VARIABLE LOADED ON EVALUATED BUS*/

int bus=0;

/*MAIN FUNCTION*/    /*VARIABLE INCREMENTED BY*/
void main(void)      /*EVALUATION FUNCTION*/
{
    :

    a=0;              /*EMBED EVALUATION FUNCTION SUBSEQUENT*/
    BUS3();           /*TO VARIABLE TO WHICH DATA IS WRITTEN*/

    :

    a=1;
    BUS3();
    b=10;
    BUS3();
    printf("BUS Traffic=%d[回]¥n", bus);
    {

    /*EVALUATION FUNCTION*/
    int BUS3(vois)
    {
        bus++;        /*INCREMENT GLOBAL VARIABLE bus*/
    }
}
```

FIG. 10

```
#include <stdio.h>
/*BUS CLASS*/
classBUS
{
    int i;
public
    BUS():i(0){ }
    int count() {return i++;}
    int count_bit(int bit,int bus)
    {
        i+=bit/bus;
        return i;
    }
    int count_hairetu(int,ele)
    {
        i+=ele
        return i;
    }
    void print () {printf("BUS Traffic=%d[ ]\n",i);}
};

int a;
/*MAIN FUNCTION*/
int main()
{
    BUS bus0;
    BUS bus1;
    BUS bus2;
    int b;
    int c[10];
    int*cp;
    int i;
    a=0;
    bus0.count();
    b=1;
    bus1.count_bit(32,8)
    cp=&c[0];
    bus2.count_hairetu(10);
    for(i=0;i<10;i++) {
        bus0.count();
        a=i;
        bus1.count_bit(32,8);
        b=i+1;
        bus2.count()
        c[i]=i*2;
    }
    bus0.print();
    bus1.print();
    bus2.print();
    return0;
}
```

FIG. 11

